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The Hidden Dimension of Learning: Time and Space

Sally L. Smith

Maria is a gifted graduate student studying toward a degree in social work. Her insight and her mastery of complex issues are superior. However, she is unable to complete papers for her coursework on time. Her professors claim that she is lazy, undisciplined, and even manipulative. When her cognitive abilities were tested, Maria's scores were in the gifted range. But her scores on The Test of Written Language place her planning, organizing, and sequencing abilities on a low seventh grade level.

Donald, a high school student, is late to all his classes. He has trouble going to bed on time at night and waking up in the morning, even with two alarm clocks. Donald has difficulty pacing himself and keeping track of time. His teachers think he is behaving this way on purpose to flout authority.

Annie's junior high school teachers call her "careless" and "scatterbrained" because she is always losing her homework, misplacing her backpack, and forgetting her gym clothes. They say she "needs to have her head reattached to her body" in order to get herself organized. They are very impatient with her and are now using a "demerit system" in an effort to impose order on her.

Max, a third grader, has been described as having a "faulty radar" because he always seems to end up in the wrong place at the wrong time, making his life and the lives of those around him very difficult. Max doesn't mean to, but he bumps into everyone, knocks things over, spills his milk and juice, and can't keep track of when it is his turn in games.

The problem that these individuals share is something that:

- parents confront every morning when they try to help a child with learning disabilities get dressed and out the door for school;
- teachers face when their students with learning disabilities cannot find their way to their next classroom, even after a month of school;

- employers encounter when their intelligent employees with learning disabilities arrive late to work, and take too long to complete required tasks or eat lunch;
- friends deal with when their friends with learning disabilities don't show up as promised and forget to call.

Individuals who struggle with issues of time and space often complain that their inner clocks are not working, their timing is off, they can't seem to pace themselves or self regulate during even familiar tasks, and they are "hopelessly lost" when tasks demand careful timing or call for a sense of space.

Most individuals acquire concepts of time and space naturally as they mature. But for those with learning disabilities, these skills don't always develop automatically and so they have to be learned. Learning disabilities can result in disorganization which can be life-long and pervasive, starting in the preschool years and, often, continuing on through adulthood. By four years of age, most children have a good understanding of spatial words and know the meaning of terms such as "beneath" and "above," "near" and "far," "under" and "over," and "above" and "below." Confusing these terms can impede learning in such areas as reading, writing, math, geography, and even history.

Two organizing systems of our society are space and time. Many people with learning disabilities have difficulties with spatial organization. They have trouble distinguishing left from right. They have a poor sense of direction, misread maps, and have trouble following printed directions. They tend to get lost even in their own neighborhoods. These individuals lack the "internal maps" that most of us use to guide how we move our bodies through space and how we travel from one place to another. "When I get lost, which is frequently, I use my portable car phone," says a doctor who has both learning disabilities and Attention Deficit/Hyperactivity Disorder (ADHD). "I always try to park in the same parking lot and use the same two rows; otherwise I never can find my car when I come back. And I'm apt to lose my parking lot ticket, too!" Feelings of helplessness and frustration frequently overtake persons with learning disabilities who stand at crossroads, bewildered about which road might lead to a chosen destination.

The person with learning disabilities who gets lost in time has life disrupted even more severely than does a person who gets lost in space. Time regulates our waking hours with tyrannical force. The alarm clock wakes us at a precise time, so that we can get to work on time. We schedule meetings and appointments throughout the day and calculate how long they will last so that we can make it to them all and still find time for lunch. We must leave work at a given time to catch a ride home, or pick up the kids, or run evening errands.

Problems for Families

The child with learning disabilities who experiences problems with space often:

- has trouble finding belongings (school books, homework, keys, toys);
- is prone to getting lost in public places (supermarkets, department stores, libraries);
- has difficulty knowing how to adjust their behavior in ways that demonstrate an appreciation of others' personal space.

This child will frequently have a room which everyone calls "the pit," with stuff piled on top of other things and little sense of organization. However, the child will claim, "I know where everything is."

The child with learning disabilities who experiences problems with time often:

Ableism

- can't seem to regulate his or her daily schedule;
- is late getting to and from places;
- has difficulty with the verbal timing of remarks that is important for effective communication and is essential to others' appreciation of a sense of humor;
- has trouble picking up the rhythm of conversations.

Problems in School

Two areas where teachers must provide structure in order for children to succeed in the classroom are space (a place for all things) and time (a time for each activity). Establishing order in these two areas will create the setting for productive learning to occur.

Creating Order in Space

Organizing desk space is often a problem for those with learning disabilities—where to put the work, where to work on it, and where to put it upon completion. They need help with:

- organizing a notebook;
- organizing a backpack;
- organizing space on paper;
- following directions about spatial organization.

Creating Structure in Time

Students may have difficulty:

- with the organization of the school day;
- with rhyming, syllabification, and breaking down sounds in words;
- handing in work on time or completing assignments in an allotted timeframe;
- planning free time;
- with timed tests;
- with long-term assignments (research or book reports; science projects).

Poor time management can cause great difficulties in the school, work, home, and social environments. One young man, Andrew, said, "You know my reading and spelling didn't cause me half the trouble my stupid left-right mix up and my getting lost and being late did. It was the night before the due date on the exam when I got to work. I never thought about time. I lost a lot of jobs because I was late and I couldn't figure out how long it would take me to do various jobs." Disorganization in time and space causes problems for friends, roommates, or life-partners (meeting people in the right place at the right time, paying bills on time, keeping an orderly home).

Disorganization in Time and Space Can Make a Person Feel Rotten!

Lacking an accurate internal sense of time and space, a person with learning disabilities may race through the day, feeling out of control and rebounding from one activity to the next. It's as if time and space *happen* to this person! These individuals find themselves

missing appointments, quitting classes and jobs, changing rooming arrangements, and being lost. Having an internal clock that isn't working right can make one feel like he or she is on the fringes of society. "I always feel out of it," says Clara, "because I come after they have started class, I don't catch up to them even when they leave, and what I am left with is a dismal sense of failure."

Working Toward Solutions

We have to present children with activities that help with categorization and classification (sorting objects and pictures, then symbols) in ways that correspond with their chronological ages, developing abilities, personal interests and increasing maturity. By working on their skills in grouping things together, and by expanding their understanding of relationships between items, we help them build strong mental "filing systems," so that well-organized information can be retrieved easily.

Children with learning disabilities tend to learn best by doing, touching, seeing, hearing, feeling; in other words, they need to learn through experience. An often overlooked means of helping children to grow in these areas is through movement and activities that involve perceptual motor skills. Learning to use their bodies in a more organized way will help them to use their minds in a more organized manner. For example:

- music helps build rhythm and timing. A drum-beat can help reinforce syllabication in reading;
- floor maps walked on or hopped over can help teach geography;
- time lines that can be walked on can help children gain a better understanding of history by placing events in an understandable time-frame;
- elastic or rope can help children understand angles and geometric forms.

People with learning disabilities and ADHD who have difficulties with their sense of time and space can be helped to overcome their difficulties and to lead productive and fulfilling lives.

Understanding Disability Issues

Association on Higher Education
and Disability

When people with disabilities are asked, "How do you want to be treated?" their typical response is, "Just like everybody else!" People with disabilities are human beings with feelings, hopes, dreams, and goals, "just like everybody else!" The approximately fifty million people who make up "the disabled" population in this country are as diverse and